

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/529,749
Source: IFWO
Date Processed by STIC: 09/08/2006

ENTERED



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/529,749

DATE: 09/08/2006

TIME: 08:55:25

Input Set : A:\10529749.txt
 Output Set: N:\CRF4\09082006\J529749.raw

3 <110> APPLICANT: Japan Science and Technology Agency
 4 KURODA, Shunichi
 5 TANIZAWA, Katsuyuki
 6 KONDO, Akihiko
 7 UEDA, Masakazu
 8 SENO, Masaharu
 10 <120> TITLE OF INVENTION: Hollow Protein Nanoparticles, and Drug Using the Same
 12 <130> FILE REFERENCE: 1035-579 / P023P08US
 14 <140> CURRENT APPLICATION NUMBER: US 10/529,749
 15 <141> CURRENT FILING DATE: 2005-03-30
 17 <150> PRIOR APPLICATION NUMBER: PCT/JP2003/015003
 18 <151> PRIOR FILING DATE: 2003-11-25
 20 <150> PRIOR APPLICATION NUMBER: JP 2002-339925
 21 <151> PRIOR FILING DATE: 2002-11-22
 23 <160> NUMBER OF SEQ ID NOS: 6
 25 <170> SOFTWARE: MS Word
 27 <210> SEQ ID NO: 1
 28 <211> LENGTH: 1218
 29 <212> TYPE: DNA
 30 <213> ORGANISM: Hepatitis B virus
 32 <220> FEATURE:
 33 <221> NAME/KEY: CDS
 34 <222> LOCATION: (1)..(1218)
 36 <400> SEQUENCE: 1
 37 atg aga tct ttg atc ttg gtt ttg tgt ttc ttg cca ttg gct gct 48
 38 Met Arg Ser Leu Leu Ile Leu Val Leu Cys Phe Leu Pro Leu Ala Ala
 39 1 5 10 15
 41 ttg ggt aag gtt cga caa ggc atg ggg acg aat ctt tct gtt ccc aat 96
 42 Leu Gly Lys Val Arg Gln Gly Met Gly Thr Asn Leu Ser Val Pro Asn
 43 20 25 30
 45 cct ctg gga ttc ttt ccc gat cac cag ttg gac cct gcg ttc gga gcc 144
 46 Pro Leu Gly Phe Pro Asp His Gln Leu Asp Pro Ala Phe Gly Ala
 47 35 40 45
 49 aac tca aac aat cca gat tgg gac ttc aac ccc aac aag gat caa tgg 192
 50 Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn Lys Asp Gln Trp
 51 50 55 60
 53 cca gag gca aat cag gta gga gcg gga gca ttc ggg cca ggg ttc acc 240
 54 Pro Glu-Ala Asn Gln Val Gly Ala Gly Ala Phe Gly Pro Gly Phe Thr
 55 65 70 75 80
 57 cca cca cac ggc ggt ctt ttg ggg tgg agc cct cag gct cag ggc ata 288
 58 Pro Pro His Gly Gly Leu Leu Gly Trp Ser Pro Gln Ala Gln Gly Ile
 59 85 90 95
 61 ttg aca aca gtg cca gca cct cct gca tcc acc aat cggt cag 336

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/529,749

DATE: 09/08/2006
TIME: 08:55:25

Input Set : A:\10529749.txt
Output Set: N:\CRF4\09082006\J529749.raw

62	Leu	Thr	Thr	Val	Pro	Ala	Ala	Pro	Pro	Pro	Ala	Ser	Thr	Asn	Arg	Gln	
63				100				105							110		
65	tca	gga	aga	cag	cct	act	ccc	atc	tct	cca	cct	cta	aga	gac	agt	cat	384
66	Ser	Gly	Arg	Gln	Pro	Thr	Pro	Ile	Ser	Pro	Pro	Leu	Arg	Asp	Ser	His	
67				115				120							125		
69	cct	cag	gcc	atg	cag	tgg	aat	tcc	aca	aca	ttc	cac	caa	gct	ctg	cta	432
70	Pro	Gln	Ala	Met	Gln	Trp	Asn	Ser	Thr	Thr	Phe	His	Gln	Ala	Leu	Leu	
71				130				135							140		
73	gat	ccc	aga	gtg	agg	ggc	cta	tat	ttt	cct	gct	gtt	ggc	tcc	agt	tcc	480
74	Asp	Pro	Arg	Val	Arg	Gly	Leu	Tyr	Phe	Pro	Ala	Gly	Gly	Ser	Ser	Ser	
75	145				150						155				160		
77	gga	aca	gta	aac	cct	gtt	ccg	act	act	gcc	tca	ccc	ata	tct	ggg	gac	528
78	Gly	Thr	Val	Asn	Pro	Val	Pro	Thr	Thr	Ala	Ser	Pro	Ile	Ser	Gly	Asp	
79					165					170					175		
81	cct	gca	ccg	aac	atg	gag	aac	aca	aca	tca	gga	ttc	cta	gga	ccc	ctg	576
82	Pro	Ala	Pro	Asn	Met	Glu	Asn	Thr	Thr	Ser	Gly	Phe	Leu	Gly	Pro	Leu	
83					180				185						190		
85	ctc	gtg	tta	cag	gcg	ggg	ttt	ttc	ttg	ttg	aca	aga	atc	ctc	aca	ata	624
86	Leu	Val	Leu	Gln	Ala	Gly	Phe	Phe	Leu	Leu	Thr	Arg	Ile	Leu	Thr	Ile	
87					195				200	*					205		
89	cca	cag	agt	cta	gac	tcg	tgg	tgg	act	tct	ctc	aat	ttt	cta	ggg	gga	672
90	Pro	Gln	Ser	Leu	Asp	Ser	Trp	Trp	Thr	Ser	Leu	Asn	Phe	Leu	Gly	Gly	
91					210				215						220		
93	gca	ccc	acg	tgt	cct	ggc	caa	aat	tcg	cag	tcc	cca	acc	tcc	aat	cac	720
94	Ala	Pro	Thr	Cys	Pro	Gly	Gln	Asn	Ser	Gln	Ser	Pro	Thr	Ser	Asn	His	
95	225				230					235					240		
97	tca	cca	acc	tct	tgt	cct	cca	att	tgt	cct	tat	ggc	tat	cgc	tgg	atg	768
98	Ser	Pro	Thr	Ser	Cys	Pro	Pro	Ile	Cys	Pro	Gly	Tyr	Arg	Trp	Met	Cys	
99					245					250					255		
101	ctg	cg	cg	ttt	atc	ata	ttc	ctc	ttc	atc	ctg	ctg	cta	tgc	ctc	atc	816
102	Leu	Arg	Arg	Phe	Ile	Ile	Phe	Leu	Phe	Ile	Leu	Leu	Leu	Cys	Leu	Ile	
103					260				265						270		
105	ttc	ttg	ttg	gtt	ctt	ctg	gac	tac	caa	ggt	atg	ttg	ccc	gtt	tgt	cct	864
106	Phe	Leu	Leu	Val	Leu	Leu	Asp	Tyr	Gln	Gly	Met	Leu	Pro	Val	Cys	Pro	
107					275				280						285		
109	cta	ctt	cca	gga	aca	tca	acc	acc	agc	acg	ggg	cca	tgc	aag	acc	tgc	912
110	Leu	Leu	Pro	Gly	Thr	Ser	Thr	Ser	Thr	Gly	Pro	Cys	Lys	Thr	Cys		
111					290				295						300		
113	acg	att	cct	gct	caa	gga	acc	acc	agc	acg	ggg	cca	tgc	aag	acc	tgc	960
114	Thr	Ile	Pro	Ala	Gln	Gly	Thr	Ser	Met	Phe	Pro	Ser	Cys	Cys	Thr		
115	305				310					315					320		
117	aaa	cct	tcg	gac	gga	aac	tgc	act	tgt	att	ccc	atc	cca	tca	tcc	tgg	1008
118	Lys	Pro	Ser	Asp	Gly	Asn	Cys	Thr	Cys	Ile	Pro	Ile	Pro	Ser	Ser	Trp	
119					325					330					335		
121	gct	ttc	gca	aga	ttc	cta	tgg	gag	tgg	gcc	tca	gtc	cgt	ttc	tcc	tgg	1056
122	Ala	Phe	Ala	Arg	Phe	Leu	Trp	Glu	Trp	Ala	Ser	Val	Arg	Phe	Ser	Trp	
123					340				345						350		
125	ctc	agt	tta	cta	gtg	cca	ttt	gtt	cag	tgg	ttc	gta	ggg	ctt	tcc	ccc	1104
126	Leu	Ser	Leu	Leu	Val	Pro	Phe	Val	Gln	Trp	Phe	Val	Gly	Leu	Ser	Pro	

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/529,749

DATE: 09/08/2006
TIME: 08:55:25

Input Set : A:\10529749.txt
Output Set: N:\CRF4\09082006\J529749.raw

127	355	360	365	
129	act gtt tgg ctt tca gtt ata tgg atg atg tgg tat tgg ggg cca agt			1152
130	Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser			
131	370	375	380	
133	ctg tac aac atc ttg agt ccc ttt tta cct cta tta cca att ttc ttt			1200
134	Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe			
135	385	390	395	400
137	tgt ctt tgg gta tat att			
138	Cys Leu Trp Val Tyr Ile			
139	405			
142	<210> SEQ ID NO: 2			
143	<211> LENGTH: 406			
144	<212> TYPE: PRT			
145	<213> ORGANISM: Hepatitis B virus			
147	<400> SEQUENCE: 2			
148	Met Arg Ser Leu Leu Ile Leu Val Leu Cys Phe Leu Pro Leu Ala Ala			
149	1	5	10	15
151	Leu Gly Lys Val Arg Gln Gly Met Gly Thr Asn Leu Ser Val Pro Asn			
152	20	25	30	
154	Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro Ala Phe Gly Ala			
155	35	40	45	
157	Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn Lys Asp Gln Trp			
158	50	55	60	
160	Pro Glu Ala Asn Gln Val Gly Ala Gly Ala Phe Gly Pro Gly Phe Thr			
161	65	70	75	80
163	Pro Pro His Gly Gly Leu Leu Gly Trp Ser Pro Gln Ala Gln Gly Ile			
164	85	90	95	
166	Leu Thr Thr Val Pro Ala Ala Pro Pro Ala Ser Thr Asn Arg Gln			
167	100	105	110	
169	Ser Gly Arg Gln Pro Thr Pro Ile Ser Pro Pro Leu Arg Asp Ser His			
170	115	120	125	
172	Pro Gln Ala Met Gln Trp Asn Ser Thr Thr Phe His Gln Ala Leu Leu			
173	130	135	140	
175	Asp Pro Arg Val Arg Gly Leu Tyr Phe Pro Ala Gly Gly Ser Ser Ser			
176	145	150	155	160
178	Gly Thr Val Asn Pro Val Pro Thr Thr Ala Ser Pro Ile Ser Gly Asp			
179	165	170	175	
181	Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu			
182	180	185	190	
184	Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile			
185	195	200	205	
187	Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly			
188	210	215	220	
190	Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His			
191	225	230	235	240
193	Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys			
194	245	250	255	
196	Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile			
197	260	265	270	

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/529,749

DATE: 09/08/2006

TIME: 08:55:25

Input Set : A:\10529749.txt

Output Set: N:\CRF4\09082006\J529749.raw

199 Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro
 200 275 280 285
 202 Leu Leu Pro Gly Thr Ser Thr Ser Thr Gly Pro Cys Lys Thr Cys
 203 290 295 300
 205 Thr Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr
 206 305 310 315 320
 208 Lys Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp
 209 325 330 335
 211 Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp
 212 340 345 350
 214 Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro
 215 355 360 365
 217 Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser
 218 370 375 380
 220 Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe
 221 385 390 395 400
 223 Cys Leu Trp Val Tyr Ile
 224 405
 227 <210> SEQ ID NO: 3
 228 <211> LENGTH: 27
 229 <212> TYPE: DNA
 230 <213> ORGANISM: Artificial Sequence
 232 <220> FEATURE:
 233 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
 235 <400> SEQUENCE: 3
 236 gccgggtaccc cgagcttacc agttctc 27
 239 <210> SEQ ID NO: 4
 240 <211> LENGTH: 27
 241 <212> TYPE: DNA
 242 <213> ORGANISM: Artificial Sequence
 244 <220> FEATURE:
 245 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
 247 <400> SEQUENCE: 4
 248 gccctcgagg aaactaaagt tcttggt 27
 251 <210> SEQ ID NO: 5
 252 <211> LENGTH: 30
 253 <212> TYPE: DNA
 254 <213> ORGANISM: Artificial Sequence
 256 <220> FEATURE:
 257 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
 259 <400> SEQUENCE: 5
 260 gccctcgaga ccatggacat tgacccgtat 30
 263 <210> SEQ ID NO: 6
 264 <211> LENGTH: 39
 265 <212> TYPE: DNA
 266 <213> ORGANISM: Artificial Sequence
 268 <220> FEATURE:
 269 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
 271 <400> SEQUENCE: 6

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/529,749

DATE: 09/08/2006

TIME: 08:55:25

Input Set : A:\10529749.txt

Output Set: N:\CRF4\09082006\J529749.raw

272 gccgagctcc taaacgcgtc cacattgaga ttcccgaga

39

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/529,749

DATE: 09/08/2006

TIME: 08:55:26

Input Set : A:\10529749.txt

Output Set: N:\CRF4\09082006\J529749.raw